Before the

House Committee on Energy and Commerce Subcommittee on Telecommunications and the Internet The Digital Future of the United States, Part V: The Future of Video May 10, 2007

Testimony of Thomas S. Rogers President and Chief Executive Officer TiVo Inc.

Chairman Markey, Ranking Member Upton, and other members of the Subcommittee, my name is Tom Rogers. I am President and Chief Executive Officer of TiVo. I want to thank the Subcommittee for inviting me to testify on the future of video. As an innovator, TiVo depends equally on the continued creation of compelling video content and the ability to access that video content on TiVo products which include using our Emmy award-winning user interface and other innovative features. Accordingly, I applaud your willingness to consider the issues of innovation, competition, and access to video signals as the committee contemplates legislative changes needed to create the proper environment for an even brighter television future for the American public.

Founded in 1997, and located in Alviso, California, TiVo pioneered a brand new category of products with the development of the first commercially available digital video recorder (DVR). Sold through leading consumer electronic retailers, the TiVo DVR is revolutionizing the way consumers watch and access home entertainment. TiVo's DVR not only allows consumers to find and record traditional television programming but it can also receive and record video programming delivered over broadband for display right on the TV set. TiVo gives consumers simple but powerful features such as the ability to pause live television so you won't miss a single part of the program because the phone rings or the delivery person is at the front door, as well as advanced but easy to use features as: SeasonPass® which remembers to record your

favorite series so you won't miss an episode; WishList® that will automatically record all the movies by a favorite director or actor you have told your TiVo DVR to record, so that you won't miss the program because you weren't home; Online Scheduling which allows you to "phone home" and remotely program your TiVo DVR if you are stuck at work and will miss a special program you wanted to watch. These and many other features have brought unprecedented value to consumers. They can enjoy their TV programs when they want and not miss a single program because they had to work late or were tied up in traffic. Moreover, the same TiVo box enables consumers to store and easily access their personal photographs, home videos, and their music collection.

Summary

This subcommittee is uniquely positioned to shape the future of television. It did so in the past by enacting legislation that has led to an immense amount of consumer choice in television content, and it has the opportunity to create the right environment for an even brighter television future where consumers get to choose what they want to watch, when they want to watch, and where they want to watch it. This is the new era where control by the consumer will have a significant impact on current business models, particularly advertising, but will lead to substantial opportunities for advertisers and broadcasters to engage with viewers on a much deeper basis. However, this subcommittee must ensure that the promise of consumer choice it has long championed, and consumer control which has now emerged as the key trend, are allowed to flourish and is not derailed by incumbent interests that are threatened by innovation and competition.

Access to Television Programming

We've gone from an era of consumer choice in distributing more and more channels, to an era of consumer control. That means allowing viewers to view content on their schedule, at their convenience, when and where they want, be it at home, on a laptop or an iPod. The consumer controls the experience, not the distributor. To provide a sense of the scale of this trend towards choice and user control, digital video recorders are used in over 17% of American households today and over 10 million iPods were sold in the last three months alone.¹

TiVo has been at the forefront of creating that consumer control by providing a device that allows people to record and view the television signals they want to see, when they want to see it. In order for that type of consumer control to be maintained in a digital world, independent consumer electronic companies like TiVo must continue to have access to the cable and broadcast television signals provided by cable, satellite, and other multi-channel video programming distributors.

CableCARDs have been a key step taken to guarantee that devices like TiVo have access to those television signals and continue the ability for consumers to control their television experience in a digital world. Congress recognized in 1996 that, with television signals beginning to become scrambled, consumer electronics companies would not be able to make devices that received television signals without access to descrambling technology. Without access to television signals by consumer electronics companies, consumers would have no alternative to cable supplied set-top boxes. And without competitive alternatives, there would

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¹ See Crupi, Anthony, "TiVo Ratings Data to Shed Light on Commercial Avoiders," MediaWeek, April 30, 2007, http://www.mediaweek.com/mw/news/recent_display.jsp?vnu_content_id=1003577813

^{(&}quot;By Nielsen's reckoning, DVRs have worked their way into 17.2 percent of all American television households"); Apple Reports Second Quarter Results (10,549,000 iPods sold during the past quarter, 24% growth in iPods over the year-ago quarter). http://www.apple.com/pr/library/2007/04/25results.html

be nothing to drive innovation and consumer choice. Section 629 of the Telecommunications Act was thus enacted to ensure that consumer electronics companies could make set-top boxes that could access all cable television channels, whether scrambled and unscrambled, which consumers could purchase at retail. As part of the implementation of Section 629, the Federal Communications Commission required the cable industry to separate the security module from the rest of the set-top box and make this security module available to consumer electronics companies so that consumers could purchase a competitive television receiving device at retail, bring it home, plug it in to their television source and it would work. The CableCARD is what the cable industry developed to fulfill this requirement.

One of the biggest threats that we see to innovation and consumer choice that the Committee must focus on is the prospect of CableCARDs being rendered useless by the implementation of technologies by video distributors that limit the number of television channels that can be received by consumers with retail CableCARD devices. Retail CableCARD devices must not be placed at a competitive disadvantage versus cable supplied set-top boxes. So the first step in guaranteeing that consumer choice and control is not frustrated at the outset is to make sure that CableCARDs are adequately supported and consumers have confidence that that they'll receive the television channels they want to receive. The subcommittee must ensure that competitive retail set-top boxes have access to all of the television programming that consumers would expect to get from a cable set-top box.

Advertising

We know that the deployment of TiVo and other digital video recorders cause at least one major shift in all households in which they are used: consumers fast-forward through

advertisements. This has certain implications for the future of television. But first and foremost, it will have an impact on over-the-air broadcasting, since that industry depends totally on advertising for its revenues.

What is often overlooked here is that for the first time in 25 years, the TiVo DVR, a new technology, is actually contributing to an increase in broadcast television viewership as opposed to facilitating a decline. In primetime today, broadcast viewing shares represent about 50% and cable/satellite shares represent about 50%. Yet in TiVo households, approximately 70% of what is recorded and played back is broadcast programs. That is a big deal for free over-the-air television.

On the other hand, because we're in an era of consumer control, the advertisements attached to the television programs are being fast-forwarded through and, therefore, broadcasters say they cannot monetize this additional viewing. We do know that in most TiVo households, consumers fast-forward through over 50% of advertisements in television programs watched on a time-delayed basis.

So the entire advertising-supported model for programming is going to have to change, and that has major implications for program ratings as well. While the Nielsen program rating used to be a rough proxy for how many people were watching an advertisement, in a world of DVR fast-forwarding, that is no longer true. So in addition to advertising, audience measurement is also going to have to significantly change to capture who is actually watching the advertisements.

Despite these changes, I am not pessimistic about advertising support for television programming in this futuristic world. First of all, viewers have been skipping advertisements for

a long time – going to the kitchen or bathroom, or switching channels with the remote. But this new era of consumer control over the television experience will certainly mean a change from a 30 second advertisement that attracts viewers merely because it happened to be attached to a program someone is seeing. In an age of consumer control, advertisers will need to find ways to engage the viewer to choose to watch an advertisement, just like readers of magazines and newspapers have always had to be engaged to spend time on an advertisement. The good news is that when the viewer is so engaged, there will be so many more opportunities to let viewers spend more time being informed about an advertised product and be more deeply impacted by the advertising offered that the value of those impressions to those advertisers will substantially increase, and the ability of broadcasters to more successfully profit by this greater level of advertising engagement is very real..

TiVo is at the forefront of providing all of the advertising inventory solutions, as well as audience measurement tools, to help advertisers increase their depth of engagement in this age of consumer control.

Broadband Video

The third major trend, defining the future of television is one that goes back to the notion of more consumer choice that this subcommittee championed, and combines it with the defining trend today of consumer control.

With the advent of YouTube, no one needs to be reminded that there is an immense amount of video available to consumers by broadband Internet connections today. However, that user-generated content has been augmented with all kinds of professional and premium content being made available via broadband connections to the personal computer as well. In fact, when

you start considering how much video of all kinds is available via broadband, the amount of choice available to consumers is staggering.

But broadband video is not television for most people because for most people it's not television unless it's on the television set. In an age of consumer control, the future of television is one in which the consumer will connect his or her broadband wire directly to the television receiving device, as any recent TiVo subscriber can today. Whether you want user-generated clips or the latest movies, you will be able to access it directly on your television set and go vastly beyond what even the best video-on-demand cable offerings might make available.

Consequently this Committee should be focused on promoting the widespread adoption of broadband and ensuring that consumers can purchase consumer electronics devices at retail, connect them to their broadband wire, and receive any video content that they wish to receive over that broadband connection.

Now the devices that make possible the delivery of broadband video to your television set need to make it really easy to allow the television viewer to search and find what they want to see quickly and easily – which are the critical elements of enabling the viewer to truly be in control of his or her video experience. Which comes back to one of the key reasons that users have gravitated to TiVo products. TiVo makes it easy to find what you want to see when you want to see it. Searchability and ease of use will only become more important in a future of infinite viewing choices.

Copyright

Finally, no discussion of the future of video would be complete without touching on the role of copyright and fair use. Innovation in the area of television and broadband video has and

will continue to depend upon the fair use doctrine's balance between the copyright holder's exclusive rights and the promotion of progress by innovators.

New inventions have always challenged existing business interests and innovators require a legal environment which permits them to innovate without fear of being sued out of existence as long as their invention has substantial, non-infringing uses with respect to the use of copyrighted content.

As a result of the fair use language and the Supreme Court's interpretation of the Copyright Act, particularly in the famous *Sony Betamax* case, innovators like TiVo have been able to develop new and innovative devices such as TiVo's DVR which has given consumers the ability to control their television viewing experience as well as sparking a new and increased legitimate consumption of content. As I mentioned previously, TiVo's innovative technology has resulted in consumers watching more broadcast television. Yet at the time TiVo debuted in the market, many in the television industry predicted the demise of free over-the-air TV. Indeed one DVR manufacturer was sued into bankruptcy. But once again it turns out that the innovation has not only been a boon to consumers but to important trends for the content industry as well. As with the VCR before it, a new innovation has increased the demand for content and the creation of new business models around that content.

TiVo believes that the reasonable balance between innovation, content, and consumers does not mean anyone should engage in piracy. Rather, commercial piracy can, has, and will continue to be fought while at the same time preserving fair use for consumers and innovators. Such a balance will continue to create incentives for content providers by expanding markets and increasing demand.

Conclusion

The Committee should not underestimate its ability to shape the future of television. It has done so before and it can do it again. We are entering a world of consumer control where independent set-top boxes with access to television signals which require CableCARDs that actually work is a critical underpinning of providing consumer choice and control. The whole notion of CableCARDs in fact should be extended to the satellite industry. Consumer choice and control means more viewing of broadcast television and less forced viewing of advertisements, and brings with it a great opportunity to create advertising engagements that preserve and expand the value of television advertising for advertisers. Finally, through the opportunity to connect broadband directly to the television set, the era of true a la carte on-demand television is here and it will give consumers both the ultimate choice of television programming that this subcommittee has fostered, and the ultimate control as to what to watch, when, and on what device. We are at a critical stage where all of that promise must be allowed to flourish and be protected against incumbent interests that are threatened by innovation and competition. I urge this subcommittee and Congress to preserve the ability of independent television receiving devices such as TiVo to have access to all of the television programming that consumers would expect to get from a cable set-top box.